

IN THE CLAIMS

The following claim set replaces all prior versions, and listings, of claims in the application:

1. (currently amended) A continuous process for preparing caprolactam in a multi-stage by Beckmann rearrangement of cyclohexanone oxime, said process comprising
 - a) feeding (i) oleum and (ii) cyclohexanone oxime into a first stage reaction mixture comprising caprolactam, sulfuric acid and SO₃,
 - b) feeding (iii) a portion of the first stage reaction mixture and (iv) cyclohexanone oxime into a second stage reaction mixture comprising caprolactam, sulfuric acid and SO₃, and
 - c) withdrawing a portion of the second stage reaction mixture, wherein the process further comprises obtaining the cyclohexanone oxime that is fed to the first and second stage reaction mixtures and is containing less than 1 wt.% water by:
 - 1) preparing an organic medium comprising cyclohexanone oxime dissolved in an organic solvent
 - 2) separating, by distillation, cyclohexanone oxime from said organic medium.
2. (currently amended) A process according to claim 1, said process further comprising
 - d) feeding (v) a portion of the second stage reaction mixture and (vi) cyclohexanone oxime into a third stage reaction mixture comprising caprolactam, sulfuric acid and SO₃, and
 - e) withdrawing a portion of the third stage reaction mixture.

3. (currently amended) Process according ~~claim 1~~ claim 2, wherein the cyclohexanone oxime that is fed to the third stage reaction mixtures contains less than 1 wt.% water.
4. (canceled)
5. (currently amended) Process according to claim 1, wherein the SO₃ content of the first and second stage reaction mixtures comprising caprolactam, sulfuric acid and SO₃ is at least 6 wt.%.
6. (currently amended) Process according to claim 1, wherein the SO₃ content of the first and second stage reaction mixtures comprising caprolactam, sulfuric acid and SO₃ is at least 8 wt.%.
7. (currently amended) Process according to claim 1, wherein the SO₃ content of the first and second stage reaction mixtures comprising caprolactam, sulfuric acid and SO₃ is at least 10 wt.%.
8. (previously presented) Process according to claim 1, wherein the SO₃ content of the oleum is between 18 and 35 wt.%.
9. (currently amended) Process according to claim 1, wherein the process ~~comprising~~ comprises:
 - a) feeding (i) oleum and (ii) cyclohexanone oxime into ~~the~~ first stage reaction mixture comprising caprolactam, sulfuric acid and SO₃,
 - b) feeding (iii) a portion of the first stage reaction mixture and (iv) cyclohexanone oxime into a second stage reaction mixture comprising caprolactam, sulfuric acid and SO₃, wherein the molar ratio M of the second reaction mixture is between 1.0 and 1.4 and the SO₃ content of the second stage reaction mixture is higher than 6 wt.%, and

- c) withdrawing a portion of the second reaction mixture from which caprolactam is recovered.
- 10. (currently amended) Process according to claim 9, wherein the SO₃ content of the second stage reaction mixture is higher than 8 wt.%.
- 11. (currently amended) Process according to claim 9, wherein the SO₃ content of the second stage reaction mixture is higher than 10 wt.%.
- 12. (currently amended) Process according to claim 1, wherein the process comprising
 - a) feeding (i) oleum and (ii) cyclohexanone oxime into ~~a~~ the first reaction mixture comprising caprolactam, sulfuric acid and SO₃,
 - b) feeding (iii) a portion of the first stage reaction mixture and (iv) cyclohexanone oxime into a second stage reaction mixture comprising caprolactam, sulfuric acid and SO₃,
 - c) withdrawing a portion of the second stage reaction mixture;
 - d) feeding (v) a portion of the second stage reaction mixture and (vi) cyclohexanone oxime into a third stage reaction mixture comprising caprolactam, sulfuric acid and SO₃, wherein the molar ratio M of the third stage reaction mixture is between 1.0 and 1.4 and the SO₃ content of the third stage reaction mixture is higher than 6 wt.%, and
 - e) withdrawing a portion of the third stage reaction mixture from which caprolactam is recovered.
- 13. (currently amended) Process according to claim 12, wherein the SO₃ content of the third stage reaction mixture is higher than 8 wt.%.
- 14. (currently amended) Process according to claim 12, wherein the SO₃ content of the third stage reaction mixture is higher than 10 wt.%.

15. (new) Process according to claim 12, wherein the cyclohexanone oxime that is fed to the first, second and third stage reaction mixtures and contains less than 1 wt.% water is obtained by:
 - 1) preparing an organic medium comprising cyclohexanone oxime dissolved in an organic solvent; and
 - 2) separating, by distillation, cyclohexanone oxime from said organic medium.
16. (new) Process according to claim 15, wherein the cyclohexanone oxime that is fed to the first, second and third stage reaction mixtures contains less than 0.2 wt.% water.
17. (new) Process according to claim 15, wherein the cyclohexanone oxime that is fed to the first, second and third stage reaction mixtures contains less than 0.1 wt.% water.
18. (new) Process according to claim 1, wherein the cyclohexanone oxime that is fed to the first, second and third stage reaction mixtures contains less than 0.2 wt.% water.
19. (new) Process according to claim 1, wherein the cyclohexanone oxime that is fed to the first, second and third stage reaction mixtures contains less than 0.1 wt.% water.